

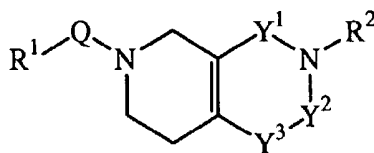
## AMENDMENT TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

**Claim 1 (currently amended).**

A compound of Formula I



I

or a pharmaceutically acceptable salt thereof, or a pyrido-N-oxide thereof, wherein:

R<sup>1</sup> is independently selected from:

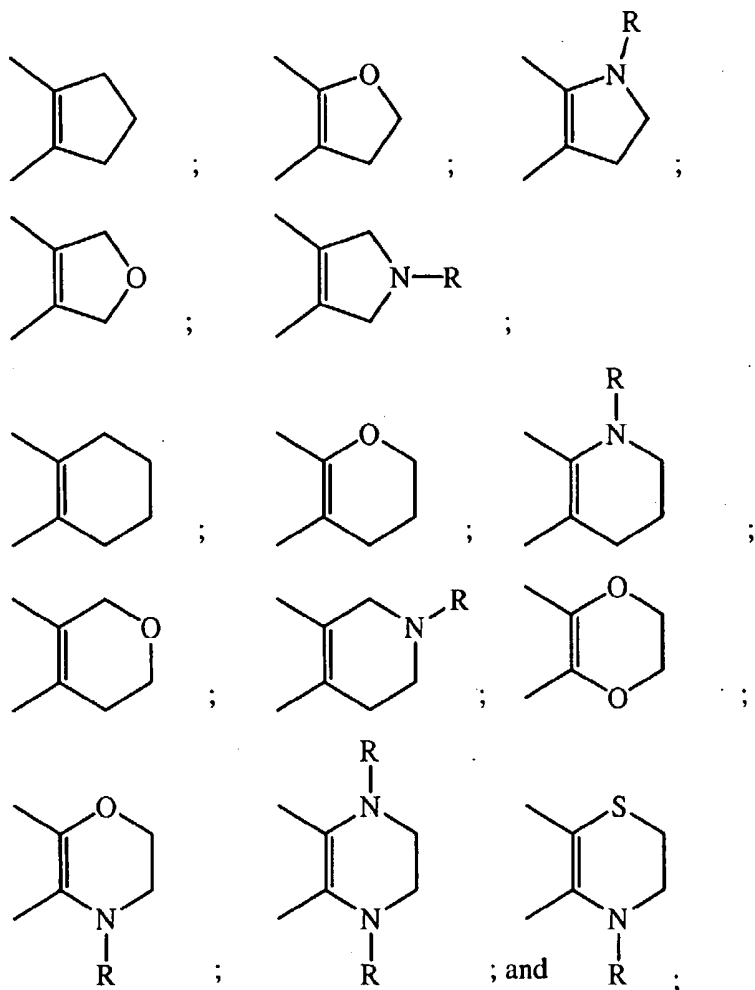
- C<sub>5</sub> or C<sub>6</sub> cycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted C<sub>5</sub> or C<sub>6</sub> cycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- C<sub>8</sub>-C<sub>10</sub> bicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted C<sub>8</sub>-C<sub>10</sub> bicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- 5- or 6-membered heterocycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted 5- or 6-membered heterocycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- 8- to 10-membered heterobicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted 8- to 10-membered heterobicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- 5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted 5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- 8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);
- Substituted 8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

~~Phenyl~~

*Amend 1, 8*

*R1 is not phenyl*

*Ex A*



R is H or C<sub>1</sub>-C<sub>6</sub> alkyl;

G is CH<sub>2</sub>; O, S, S(O); or S(O)<sub>2</sub>;

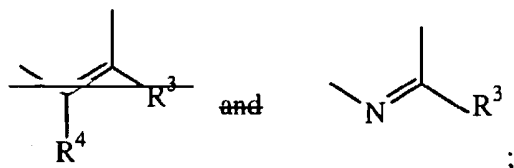
m is an integer of 0 or 1;

Y<sup>1</sup> is CH<sub>2</sub>, C(O), or S(O)<sub>2</sub>;

Y<sup>2</sup> is C(O);

Y<sup>3</sup> is N(R<sup>4</sup>); or

Y<sup>2</sup> and Y<sup>3</sup> <sup>are</sup> may be taken together to form a diradical group selected from:



R<sup>3</sup> is independently selected from the groups:

H;

CH<sub>3</sub>;CH<sub>3</sub>O;CH=CH<sub>2</sub>;

HO;

CF<sub>3</sub>;

CN;

F; and

Cl;

~~R<sup>4</sup> is independently selected from the groups:~~

~~H;~~~~CH<sub>3</sub>;~~~~CH<sub>3</sub>O;~~~~HO;~~~~CF<sub>3</sub>; and~~~~CN; and~~

~~wherein R<sup>4</sup> is bonded to a carbon atom, R<sup>4</sup> may further independently be~~

~~halo or CO<sub>2</sub>H;~~

Q is selected from:

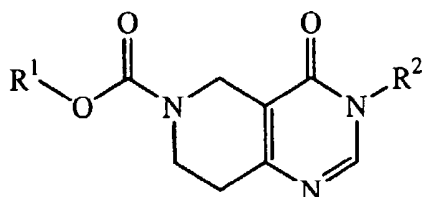
OC(O);

CH(R<sup>5</sup>)C(O);OC(NR<sup>5</sup>);CH(R<sup>5</sup>)C(NR<sup>5</sup>);N(R<sup>5</sup>)C(O);N(R<sup>5</sup>)C(S);N(R<sup>5</sup>)C(NR<sup>5</sup>);CH<sub>2</sub>N(R<sup>5</sup>);

SC(O);

CH(R<sup>5</sup>)C(S);SC(NR<sup>5</sup>);

Ex-A



III

or a pharmaceutically acceptable salt thereof, or a pyrido-N-oxide thereof  
wherein:

R<sup>1</sup> is independently selected from:

C<sub>5</sub> or C<sub>6</sub> cycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted C<sub>5</sub> or C<sub>6</sub> cycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

C<sub>8</sub>-C<sub>10</sub> bicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted C<sub>8</sub>-C<sub>10</sub> bicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

5- or 6-membered heterocycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted 5- or 6-membered heterocycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

8- to 10-membered heterobicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted 8- to 10-membered heterobicycloalkyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted phenyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted naphthyl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted 5- or 6-membered heteroaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

Substituted 8- to 10-membered heterobiaryl-(C<sub>1</sub>-C<sub>8</sub> alkylenyl);

~~Phenyl~~;

Substituted phenyl;

Naphthyl;

Substituted naphthyl;

5- or 6-membered heteroaryl;

Substituted 5- or 6-membered heteroaryl;

8- to 10-membered heterobiaryl; and

Ex-A

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 2-methoxy-pyridin-4-ylmethyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-chloro-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-bromo-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-iodo-benzyl ester;

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-dimethylamino-benzyl ester; and

3-Benzyl-4-oxo-3,5,7,8-tetrahydro-4H-pyrido[4,3-d]pyrimidine-6-carboxylic acid 4-methylsulfanyl-benzyl ester; or

a pharmaceutically acceptable salt thereof.

**Claim 10 (original).** A pharmaceutical composition, comprising a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.

*Ex A*  
**Claim 11 (currently amended).** <sup>A</sup> The pharmaceutical composition ~~according to Claim 10~~, comprising a compound <sup>according to</sup> ~~according to as in~~ Claim 7 or 9, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.

**Claim 12 (original).** A method for treating arthritis, comprising administering to a patient suffering from an arthritis disease a nontoxic antiarthritic effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

**Claim 13 (original).** The method according to Claim 12, wherein the arthritis is osteoarthritis or rheumatoid arthritis.

*A method for treating osteoarthritis or rheumatoid arthritis, comprising administering to a patient in need thereof, a therapeutically effective amount of a compound according to claim 7 or 9, or a pharmaceutically acceptable salt thereof.*

**Claim 14 (currently amended).** ~~The method according to Claim 13, wherein the compound according to Claim 1 is a compound according to as in Claim 7 or 9.~~

**Claim 15 (new).** The compound according to Claim 1, wherein Q is  $\text{CH(R}^5\text{)C(O)}$ .

**Claim 16 (new).** The compound according to Claim 1, wherein  $\text{R}^1$  is substituted phenyl-( $\text{C}_1\text{-C}_8$  alkylenyl).